REMARKS

Applicants appreciate the thorough examination of the present application, as evidenced by the Official Action. The Official Action objects to Claims 17-19 as incorrectly depending from independent Claim 1, as opposed to independent Claim 11. The Official Action also objects to the drawings, and Fig. 5 in particular, for failing to show callouts 500a and 500b, both described in the specification. In addition, the Official Action rejects Claims 8, 18 and 47 under 35 U.S.C. § 112, first paragraph, as containing subject matter that was not described in the specification sufficient enough to enable one skilled in the art to practice the invention. More particularly, the Official Action alleges that the terms "hash table" and "vector of package element schemata" in the respective claims are unclear, and that the specification does not adequately describe the terms. Finally, the Official Action rejects all of the claims, namely Claims 1-74, under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0010668 to Travis et al., in view of U.S. Patent Application Publication No. 2002/0156661 to Jones et al. (assigned to Travelocity.com), and further in view of various combinations of Web site materials from Lastminute.com, prior art admitted in the specification, and an Official Notice of facts outside the record which are alleged to be capable of instant and unquestionable demonstration of being "well known."

In response to the Official Action, Claims 12, 13 and 17-19 have been amended to correctly depend from independent Claim 11. Also, Fig. 5 has been amended, as enclosed under separate cover, to include callouts for 500a and 500b in a manner consistent with the specification. Further, Claim 47 has been amended to more clearly define the claimed invention. More particularly, Claim 47 has been amended to recite that the package template includes at least one component schemata. As explained in more detail below, Applicants have not amended Claims 8 or 18 in view of the § 112, first paragraph rejection of such claims. In this regard, Applicants respectfully traverse the rejection of Claims 8 and 18 under § 112, first paragraph, and submit that the term "hash table" is well known to those skilled in the art such that the specification does adequately describe the term. As also described in more detail below, Applicants have not amended Claims 1-74 in view of the § 103(a) rejection of such claims, and therefore respectfully traverse the rejection of the claims under § 103(a).

As indicated above, the Official Action rejects Claims 8 and 18, indicating that the term "hash table" is not adequately described in the specification. Applicants respectfully submit, however, that the term "hash table" is well known to those skilled in the art. More particularly, as defined by the National Institute of Standards and Technology (NIST), the term "hash table" can be defined as "[a] dictionary in which keys are mapped to array positions by a hash function." NIST, *Hash Table* (visited March 20, 2003) <http://www.nist.gov/dads/HTML/hashtab.html>. Also, as defined in the Tool Command Language (Tcl), the term "hash table" can be defined as follows:

> A hash table consists of zero or more entries, each consisting of a key and a value. Given the key for an entry, the hashing routines can very quickly locate the entry, and hence its value. There may be at most one entry in a hash table with a particular key, but many entries may have the same value. Keys can take one of three forms: strings, one-word values, or integer arrays. All of the keys in a given table have the same form, which is specified when the table is initialized.

Tcl Developer Xchange, *Library Procedures – Tcl_Hash Manual Page* (visited July 1, 2003) <http://tcl.activestate.com/man/tcl8.3/TclLib/Hash.htm>.

Thus, as used in the specification of the application, algorithm **600** may maintain a hash table of items (array positions or entries) keyed by attributes (keys). As such, a hash table lookup may be performed for each required attribute (key), and the formation of the intersection of the sets of items (array positions or entries) having that attribute (key). *See* Pat. App. page 33, lines 16-19. Applicants therefore respectfully submit that the term "hash table" is well known to those skilled in the art. Applicants also respectfully submit that the specification does describe the term "hash table" and use of a hash table in such a manner as to permit one skilled in the art to make and/or use the invention. As such, Applicants respectfully submit that the rejection of Claims 8 and 18 under § 112, first paragraph, is overcome.

As also indicated above, the Official Action rejects Claims 1-74 as being unpatentable over the Travis application, in view of the Jones application, and further in view of various combinations of Web site materials from Lastminute.com, prior art admitted in the specification,

and an Official Notice of facts outside the record which are alleged to be capable of instant and unquestionable demonstration of being "well known." The Travis application discloses an online targeted merchandising and marketing system that allows a user to purchase an entire experience (package), including commodities from a plurality of vendors, in a single transaction. As disclosed, the components of the experience that will be sold can be selected by readily identifying the most basic components (e.g., a tour package and an airline ticket for a vacation experience), and/or by identifying components via brainstorming sessions and focus group analysis. The selection of components may be further refined by cluster analysis. Before selecting the components of the experiences, however, the system can identify target market segments and buying intentions of consumers. Demographic profiling of members of the target market can be used to identify archetypes associated with the customers. The system can then use the archetypes to match customers to particular experiences.

The Jones application discloses a goal-oriented travel planning system. As disclosed, the system processes travel requests based upon a user's travel destination goal. The system processes the travel requests by interactively determining, from the travel destination goal, a travel itinerary, which may include flight information, hotel information, and ground transportation, to ensure the user accomplishes the travel destination goal. The Lastminute.com Web site materials disclose a Web portal for searching for goods and services, such as flights, holidays, restaurants, hotels, gifts, entertainment, and auction items. As disclosed, Lastminute.com attempts to "encourage spontaneous, romantic and sometimes adventurous behavior by offering users the chance to live their dreams at unbeatable prices."

As recited by independent Claims 1 and 11, a method and system are provided, respectively, for offering items for sale in a group. The method and system include an affinity space coordinate defined for each of a number of items available for sale, and a package template including at least one mandatory element schema having an associated affinity space description. As disclosed in the specification, for example, the affinity space for restaurants may include qualities, such as "service," "romance," "impressiveness" and "food quality," associated with the respective restaurants. Pat. App. page 29, lines 14-15. The method and system also include comparing the affinity space coordinate for each of the items with the affinity space description

associated with the package template. Then, if a match is made from the comparison, a package that is defined at least in part by the package template and includes at least one item with a matching affinity space description.

In contrast to the claimed invention of independent Claims 1 and 11, none of the cited references, individually or in combination, teach or suggest defining an affinity space coordinate for each of a plurality of products and services. Also, none of the cited references teach or suggest creating a package template that includes an affinity space description, as also recited by independent Claims 1 and 11. Further, none of the cited references teach or suggest comparing the affinity space coordinate for each item with the affinity space description associated with the package template. Various of the cited references do disclose packaged or grouped items, however, nowhere do any of the cited references disclose defining an affinity space coordinate for each of a plurality of products and services, or creating a package template from which the packages are selected.

The Official Action alleges that the Travis application discloses creating a package template that includes an affinity space description. And while the Official Action correctly identifies that the Travis application does not disclose defining affinity space coordinates for the items for sale, or comparing the affinity space for each item with the affinity space description associated with the package template, the Official Action cites the Jones application for these elements of the claimed invention. In contrast to the allegations of the Official Action, Applicants respectfully submit that the Travis application does not teach or suggest creating a package template that includes an affinity space description. Further, Applicants respectfully submit that the Jones application does not teach or suggest defining affinity space coordinates for the items for sale, or comparing the affinity space for each item with the affinity space description associated with the package template.

The Travis application discloses that packaged components can be selected by readily identifying the most basic components and/or by identifying components via brainstorming sessions and focus group analysis, where the selection may be further refined by a cluster analysis. *See* paragraph 0018. Nowhere does the Travis application teach or suggest, however, that the most basic components of a package are identified from a template including an affinity

space description, or that the brainstorming sessions and focus group analysis identify components from a template including an affinity space description. In fact, the only specific basis given for selecting components of a package are demographic profiles, which may be used to identify archetypes associated with customers. Further, while the Travis application does disclose refining a selection of products using clustering, such clustering as disclosed by the Travis application does not match an affinity space description with one or more affinity space coordinates of products and services, as recited in independent Claims 1 and 11.

The Jones application, like the Travis application and contrary to the Official Action, does not teach or suggest defining affinity space coordinates for the items for sale, or comparing the affinity space for each item with the affinity space description associated with the package template. The Jones application discloses interactively building an itinerary based upon a user's travel destination goal, where the itinerary may include air and/or ground transportation, hotels, restaurants, and activities. The Jones application discloses databases storing data relating to components of an itinerary, however, nowhere does the Jones application teach or suggest that the data comprises affinity space coordinates or even that the data have associated affinity space coordinates. Also, the Jones application discloses that components (e.g., transportation, hotel, restaurant, activities, etc.) of an itinerary can be selected based upon travel parameters, such as an indication of whether the user wants activity and restaurant information. See paragraph 0040. The Jones application does not teach or suggest, however, that the components of the itinerary are selected by comparing the affinity space for each item or component with an affinity space description associated with an itinerary or package template, as recited by independent Claims 1 and 11.

Further, as indicated above, the Lastminute.com Web site materials disclose a Web portal for searching for goods and services to encourage various types of behavior, including spontaneous, romantic and/or adventurous behavior. Like the Travis and Jones applications, however, the Lastminute.com Web site materials do not teach or suggest defining an affinity space coordinate for each of a plurality of products and services, creating a package template that includes an affinity space description, or comparing the affinity space coordinate for each item with the affinity space description associated with the package template, all of which are recited

by independent Claims 1 and 11. Applicants therefore respectfully submit that Claims 1 and 11 are patentably distinct from all of the cited references, taken individually or in combination, and as such, the rejection of independent Claims 1 and 11 are overcome.

Independent Claims 21, 28, 29 and 32 recite a method and system of offering travel arrangements over a decentralized computer network, a method of dynamically creating packages, and a method for building packages, respectively. The methods and system include dynamically generating at least one travel package based on at least one travel package template and travel component descriptions. The travel packages are then offered to a consumer. In a manner similar to that described above with respect to independent Claims 1 and 11, none of the cited references, individually or in combination, teach or suggest a method including dynamically generating travel packages based upon travel package templates, as recited by independent Claims 21, 28, 29 and 32. Applicants therefore respectfully submit that the method and system of independent Claims 21 and 28, and the methods of independent Claims 29 and 32, are patentably distinct from all of the cited references, taken individually or in combination, for at least the reasons given above with respect to independent Claims 1 and 11. As such, Applicants also respectfully submit that the rejection of independent Claims 21, 28, 29 and 32 is overcome.

Independent Claims 58, 72, 73 and 74 recite a method of using a computer to develop and offer packages, a package schema data structure, a dynamic package sales system and a dynamic package sales method. As recited, the methods, data structure and system include a package schema or package model that includes mandatory element, or element schema, and optional element, or element schema. Independent Claim 58 further recites the step of determining, for each mandatory element schema, items that fit to develop candidate packages. Independent Claim 72 further recites that the data structure further includes required attributes and matching criteria. Independent Claim 73 includes a matching engine that matches components with package models to develop complete packages, and independent Claim 74 includes matching components with package models. In this regard, each of independent Claims 58, 72, 73 and 74 utilize or recite package templates such that packages can be developed from the templates. And as described above with respect to independent Claims 1 and 11, none of the cited references,

individually or in combination, teach or suggest package templates from which packages can be developed. Applicants therefore respectfully submit that the methods, data structure and system of independent Claims 58, 72, 73 and 74, are patentably distinct from all of the cited references, taken individually or in combination, for at least the reasons given above with respect to independent Claims 1 and 11. As such, Applicants also respectfully submit that the rejection of independent Claims 58, 72, 73 and 74 is overcome.

As indicated above, Applicants respectfully submit that independent Claims 1, 11, 28, 29, 32, 58 and 72-74 are patentably distinct from the cited references, taken individually or in combination. Dependent Claims 2-10, 12-27, 30, 31, 33-57 and 59-71 each depend, directly or indirectly, from one of independent Claims 1, 11, 28, 29, 32, 58 and 72-74, and as such, include the recitations of a respective independent claim. Applicants therefore respectfully submit that dependent Claims 2-10, 12-27, 30, 31, 33-57 and 59-71 are patentably distinct from all of the cited references, taken individually or in combination, for at least the reasons given above with respect to the respective independent claim. As such, Applicants further respectfully submit that the rejections of dependent Claims 2-10, 12-27, 30, 31, 33-57 and 59-71 are overcome.

In addition to the reasons described above, Applicants respectfully submit that various of the dependent claims recite additional features that are patentably distinct from all of the cited references, taken individually or in combination. For example, dependent Claims 4 and 14 recite that an elicited consumer constraint includes customer mood, where a package template is selected or rejected based at least in part on the consumer constraint. Just as none of the cited references teach or suggest defining an affinity space coordinate or description for either items for sale or package templates, Applicants respectfully submit that none of the cited references teach or suggest that none of the cited references, taken individually or in combination, teach or suggest eliciting a consumer constraint including customer mood. The Official Action alleges that the Lastminute.com Web site materials disclose that constraints include customer mood. Applicants respectfully submit, however, that the Lastminute.com Web site materials do not disclose customer mood as a constraint for selecting or rejecting a package template based at least in part on customer mood. The Lastminute.com Web site materials do disclose a mission statement of Lastminute.com to "encourage spontaneous, romantic and sometimes adventurous

behavior by offering users the chance to live their dreams at unbeatable prices." The Web site materials do not disclose, however, that the mission statement or the encouraged behaviors in the mission statement, operate as constraints in selecting or rejecting package templates, as recited by dependent Claims 4 and 14.

Also, dependent Claims 8 and 18 recite a hash table including items keyed by affinity space coordinate, and that a hash table lookup is performed for each required affinity space description. As explained above, none of the cited references, individually or in combination, teach or suggest defining an affinity space coordinate for each of a plurality of products and services, creating a package template that includes an affinity space description, or comparing the affinity space coordinate for each item with the affinity space description associated with the package template. Likewise, none of the cited references, individually or in combination, teach or suggest a hash table or performing a hash table lookup, as recited in dependent Claims 8 and 18.

The Official Action indicates that the Examiner has considered a hash table as information tabulated and stored about restaurants. With this definition, the Official Action continues by alleging that it is well known and admitted prior art to store and tabulate information about restaurants. Applicants respectfully submit, however, that based upon the well-known definition of the term "hash table," as given above, it is not well known or admitted prior art to maintain a hash table including items keyed by affinity space coordinate, or perform a hash table lookup for one or more required affinity space descriptions, as recited in dependent Claims 8 and 18. It is also noted that the definition of the term "hash table" given in the Official Action is quite different from the definition that would be understood by those skilled in the art. As such, any analysis of Claims 8 and 18 based upon the definition of "hash table" given in the Official Action is immaterial to the patentability of those claims.

The Official Action also alleges that it is well know that entities like J.D. Powers and Associates and AAA store, compile and tabulate affinity space coordinates about various products and services. Applicants respectfully submit that it is not well known that entities such as J.D. Powers or AAA store, compile and tabulate affinity space coordinates about various products and services, and as such, Applicants respectfully traverse this assertion to the extent

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that Official Notice has been taken with respect to it. In this regard, it is noted that whereas the Official Action has indicated that entities such as J.D. Powers or AAA store, compile and tabulate affinity space coordinates about various products and services, the Official Action has not provided any evidence to that fact.

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CONCLUSION

In view of the amendments to the claims and drawings, as well as the remarks presented above, Applicants respectfully submit that all of the claims of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.
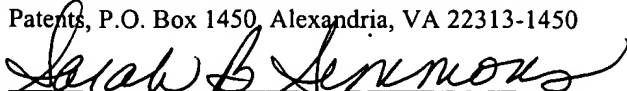
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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Sarah B. Simmons

Version with Markings to Show Changes Made:

Claims 12, 13, 17-19 and 47 have been amended as follows:

12.   (Amended) The system of claim ~~1~~ 11 wherein the user interface arrangement includes a page generator that dynamically ~~generating~~ generates an html page containing a description of the package, and transmits the html page over a decentralized computer network to at least one consumer web browsing appliance.

13.   (Amended) The system of claim ~~1~~ 11 wherein the user interface arrangement also elicits at least one constraint from a consumer, and selects or rejects the package template based at least in part on the elicited consumer constraint.

17.   (Amended) The system of claim ~~1~~ 11 wherein the comparator includes a database engine that searches the computer database for items having affinity coordinates matching the affinity space description associated with the package template.

18.   (Amended) The system of claim ~~1~~ 11 further including a hash table of the plural items keyed by affinity space coordinate, ~~and~~ wherein the comparator performs a hash table lookup for each required affinity space description.

19.   (Amended) The system of claim ~~1~~ 11 further including a purchase transactor that permits a consumer to purchase the package by transmitting at least one message over a digital communications network.

47.   (Amended) The method of claim 32 wherein said package template includes a ~~vector of package element~~ at least one component schemata.